

ELECTRICAL MEASUREMENT & MEASURING INSTRUMENTS

UNIT 4 Part (i)

AC Potentiometers

Measurement of Unknown EMF

- The emf to be measured is connected across the terminals A-A' using selector switch S3.
- Sliding contacts of both the potentiometers are adjusted till the contacts of both the potentiometers are adjusted till the null deflection is obtained
- Under the balance condition, the in-phase component of the unknown emf is obtained from in-phase potentiometer while the quadrature component of the unknown emf is obtained from
- quadrature potentiometer.
- If needed the polarity of the test voltage may be reversed by using sign changing switches S1 and S2 to balance the potentiometer.

APPLICATION OF AC POTENTIOMETER

- Voltmeter Calibration
- Ammeter Calibration
- Wattmeter and Energy meter Testing
- Measurement of self-Reactance of a coil